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AUTHOR Kudva, Pramila
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ABSTRACT

Education provides the opportunity to face social change, and a teacher's role in this process is significant. Until recently, teacher expertise was defined only in terms of knowledge of the subject taught, and teaching itself was not considered a professional activity. This paper describes the entailment of a teacher's profession, examining the difference between professionalism and amateurism. After discussing the importance of integrity in teaching and the relationship of integrity to professionalism, the paper explains the need to have a strong knowledge base in order to move forward and improve. If teachers do not equip themselves with the necessary knowledge and attitudes about change, they will be left behind as change occurs. Teachers are the key to quality education and must be familiar with current educational technology (e.g., tele-access and virtual publishing). Knowledge can be categorized into two series of distinctions: (1) public knowledge, which is necessarily explicit, and personal knowledge, which can be explicit or tacit; and (2) and propositional knowledge, which is "knowing that"; procedural knowledge, which is "knowing how"; and images and impressions, which are held in memory but not represented in propositional form. There are four kinds of processes which contribute to professional performance: processes for acquiring and interpreting information, skilled behavior, deliberate processes, and meta processes. (SM)

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RELEVANCE OF A KNOWLEDGE BASE FOR A TEACHER AS A PROFESSIONAL

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PRAMILA KUDVA
Lecturer, H. J. College of Education, Khar-west, Mumbai

P. Kudva

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At the outset, the sentiments of a true teacher may be stated thus:

A hundred years from now, it does not matter what my bank balance was, the sort of house I lived in, or the kind of car I drove, but the world may be a different place because, I was important in the life of a child.

There seems to have been a shift in this paradigm. Education, today, has turned out to be a business in the global market place and the job of an educational institution has become one of producing saleable commodities. Professors and teachers have become factory workers churning out goods for which there may not necessarily be enough utility.

Somewhere along this line of development, it was overlooked that human beings are 'learning' creatures. They cannot survive without learning and that learning is a continuing and life-long process. It is a process for development; a process for creating a new society; a process for designing a desirable future. In short, it is an evolution.

The world is changing at a dizzying speed. All the major technologies of the world are on a runaway path transforming practically every dimension of life and the planet Earth beyond the wildest imaginations of the most brilliant futurists. Never before have we had greater disasters confronting our future nor

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have we had more serious challenges and opportunities than offered today. Our challenge is to free 'tomorrow' from the prisons of the past.

Education provides the opportunity to face social change. Reforming the educational system is a monumental task. A teacher's role in this process is of considerable significance.

Entailment of a Teachers' Profession

Professionalism is a bent of mind, an attitude towards the work one does. The characteristics of a professional are deep involvement with work, high degree of competence, diligence and a flexible approach to working hours.

Until recently, the expertise of a teacher was defined only in terms of the knowledge of the subject taught. Teaching itself was not considered a professional activity but something one learnt how to do; like a driving car.

Profession has several synonyms – occupation, career, calling, vocation are some of them. Vocation, derived from the Latin verb *'vocare'*, is work to which one is called to by the gods. With a vocation comes self-imposed obligations to grow, to improve, to strive, to serve, to be our best - the driving mechanism of vocation is the will to do - not a job.

Academic profession is not a genuinely unitary profession. Academics belong to a large number of different specialties that, as primary points of identification and commitment, diverge considerably. There are scientists, humanists, theoreticians and practitioners. The professor of business management as a professional may have little in common with that of a

professor of languages. Similarly, the chemistry department has professional interests distinctly different from those of the English department.

The most effective professionals have influence beyond that afforded by their positions. This effectiveness comes from constant learning, being open to and seizing opportunities and pursuing a vision. Effectiveness is correlated with leadership. At the same time, leadership and ethics are inseparable - unethical leadership is an oxymoron. A teacher, in his own right, leads the students.

As Rushworth Kidder[1] pointed out: "Each of us, after all, is a teacher of moral values. The examples we set, the choices we make, the lives we live, broadcast potent and clear ethical signals to all within our radius. We cannot avoid responsibility for our moral atmosphere. We create it hour by hour in our actions and motives, seeding the next generation of moral actions with the ones we cultivate as models today."

However, disciplines and departments do tend to have a centrifugal force to the extent that the professional interests of the faculty can counter the mandates of the administrative hierarchy. The effect can fracture the university or department. A professional needs to guard against this.

The difference between professionalism and amateurism needs to be understood. According to Dr. Frager[2], there are: "...only two differences between amateurs and professionals. One is that professionals have received considerable, systematic training in the theories and techniques they use. ***Relevant*** theories and techniques are not likely to be left out of their education."

Integrity

Integrity comes from the Latin word '*integritas*', which means entire, untouched, or whole. In relation to professional conduct, integrity is defined as "uncompromised values" - *i.e.*, professionalism is behavior aligned with uncompromised values. Integrity manifests trust. To be consistently and professionally effective requires balance between passion, vision and action, with integrity aligning each step along the way. This alignment has been described as authenticity. Teaching is authentic action, a unique and honorific mode of engagement in life.

Moving forward may be difficult for those whose belief system and personal identity are totally invested in the old paradigm; they perceive no reason to change. The personal and professional trap is that any paradigm, or model of reality, that has become comfortable also has become self-limiting. The teaching profession [or for that matter, any other] can move forward only to the extent that individuals within the profession develop new philosophies. We must make the best decisions to move most effectively from the past to the future.

It would be incorrect to make the best decisions by relying solely on the past achievements. Nor can the best decisions be made by totally ignoring the past. Therefore, the will and the way need to be found to develop creative solutions to the challenges that are faced today: "**To blend the best of the past into our vision for the future**."

Moving forward and continuously improving, inevitably involves change. With change comes uncertainty. To overcome this uncertainty, a strong knowledge base is very essential.

Why Knowledge Base?

When Copernicus proposed that the heavenly bodies revolved around the Sun and not the Earth, the new frame accepted the notions of the circular motion of the 'stars'. In subsequent centuries, the concept of circular motion, as well as that of the stars, was replaced by the elliptical orbits and the planet. It was further found that the solar system is but a part of the universe. Each paradigm thus subsumes what precedes it. In the same way, schooling of the 21st century will be built on what is already known to be valid about learning, expanding the canvas rather than obliterating the part of the picture already painted on it.

To quote Dr. S. Radhakrishnan, Ex-President of India and a great philosopher in his own right, " Knowledge is not something to be packed away, in some corner of our brain, but what enters into our being, colors our emotions, haunts our souls and is close to life itself."

If the teachers do not equip themselves with the knowledge and the development of change, the changing times will go ahead and the teachers will be left behind. For instance, this is the time of Internet and cyber surfing. A new term 'infosphere' has been coined which is analogous to the biosphere. Technologically, the infosphere traces back to the telegraph and the radio, the first computers and the monitors, the internet and the world wide web. Yet, with

its far-reaching impact, the infosphere, with its far-reaching global impact, is the product of political and sociological change. If the sputnik, the manned lunar landings, encouraged people to think globally, the breaking of the Berlin wall brought down the political barriers. The infosphere has a lot to offer to classrooms.

Tele-access is the on-line use of resources in learning. The on-line has libraries, databases, museums and the like. The student may access the internet to complete his/her project, download images and so on.

Virtual publishing: The ability to publish no longer depends solely on a printing press. The self-worth of an individual grows when the work reaches an audience beyond the classroom. This kind of virtual publishing is hardly limited to text documents. It can include graphics, video, sound and animation as well as hypertext links of digital books.

The teacher is the key to providing quality education. For society to accept teachers as professionals, teaching needs to conform to society's professional practice model.

Society's professional practice model is knowledge based and client oriented. It is a pact between the society and members of an occupation. The profession assumes collective responsibility for defining, communicating and enforcing professional standards of practice and ethics. It develops and maintains a process, which ensures that both the research and craft knowledge accumulated in the field are communicated and used effectively by all its

members. That knowledge is also used to prepare, induct, certify, select and evaluate new members. Further, the profession ensures continuous generation of new knowledge. Differences in knowledge levels, expertise, responsibility and productivity result in differentiated roles, status and compensation.

Teaching requires an individual to exercise discretion and judgment in meeting the needs of students thus making teachers assume the rights and responsibilities of professionals in our society. Teachers need to keep in mind – "We would not have had an Einstein if the shoulders of Newton were not available to him."

Knowledge Base

Michael Eraunt[3] categorises knowledge into two series of distinctions:

1. i) Public knowledge which is necessarily explicit.

   ii) Personal knowledge which can either be explicit [capable of being shared and made public] or tacit [incapable of being shared and made public without being transformed into some explicit representation].

2. i) Propositional knowledge which is knowing 'that'.

   ii) Procedural knowledge which is knowing 'how'.

   iii) Images and impressions, which are held in memory but not represented in propositional form, although propositions may be derived from them through reflection.

Knowledge of a person for example, is likely to include images and impressions from a series of incidents held in memory, some public facts and

some personal explicit propositions, which may well have been first articulated in casual conversation.

Public propositional knowledge comprises facts, concepts, theories and conceptual frameworks. Such knowledge can be absorbed from one's family and local community or 'picked-up' during conversations with fellow professionals without there being any specific intention to learn about it. Public knowledge may be used in a conscious, deliberate way or used almost automatically because, it has become a part of one's normal pattern of thinking. Thus use of public knowledge is much greater than usually recognised.

Public propositional knowledge requires thinking about the context of use but also about the particular interpretation to be given to each concept or idea in each particular set of circumstances. As a result of these episodes of use, knowledge becomes personalised. Its specific meaning for any individual depends on use and is also affected by how that person links it to his personal cognitive framework. This process of use incorporates the concept into the person's action knowledge making it readily available for further use. However, public knowledge, which has not been used, is unlikely to be used again. Thus, both the meaning and perceived relevance of public knowledge are strongly influenced by the history of its use or non-use.

Personal propositional knowledge can be acquired by a process of personalizing public knowledge or by learning from experience. Both public

and personal knowledge are normally interactively involved but in varying proportions.

Relationship between Professionalism and Knowledge Base

There are four kinds of processes, which contribute to professional performance.

1. *Processes for acquiring and interpreting information:* In education, a great deal of information is acquired piece-meal. It is then gradually used to build up a picture of a person or a situation. Although teachers receive some information from records and comments from other teachers, their knowledge is based mainly on their own personal experience, direct encounters in the class.

The process of information also differs according to the mode of interpretation:

- Instant interpretation or pattern recognition as in recognising a person.
- Rapid interpretation as in monitoring one's progress in the course of a conversation.
- Deliberative interpretation if there is time for thought and discussion and even for collecting further information.

Under conditions of rapid interpretation, teachers will respond to situations on the basis of their current images of the pupils, which in turn may have been formed with little time for reflection. Under conditions of deliberate interpretation, the accessible information is likely to be carefully considered.

2. *Skilled behaviour* is a complex sequence of actions which has become so routinised through practice and experience that it is performed without conscious thinking or deliberation. Teaching is more like riding a bicycle through busy traffic. Habitual routines are punctuated by bouts of rapid decision-making. These decisions do not involve deliberative processes but are interactive decisions taken on the spur of the moment. The development of routines is a natural process, essential for coping with the job and responsible for increased efficiency.

3. *Deliberate processes* such as planning, evaluating and problem-solving cannot be acquired by using procedural knowledge alone. They require unique combinations of propositional knowledge, personal knowledge and professional judgement based on this knowledge.

4. *Meta processes* are concerned with directing and controlling one's "own behaviour".

Very often the gap between account and action is a natural consequence of people's perceptual frameworks being determined by what they want or expect to see and by people reporting back to them what they think they want to hear. The educational system has to be customer friendly. If not, it leads to a gap between the perceived and expected service.

One of the most important meta processes is self-development, *i.e.* professional expertise. Professional expertise is embedded in the quality of the processes that constitute professional work. It involves a process of continuous

learning of latest developments in the relevant field. Yesterday's competitive edge becomes today's qualifying factor.

To conclude – 'No man can reveal to you what aught but that which already lies half asleep in the dawning of your knowledge.'- **Kahlil Gibran**

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